

1 Claims

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- 3 1. A method for synthesising a given peptide or
- 4 its derivative which contains a proline
- 5 residue or a proline derivative, at proximity
- 6 to, or at, the C-terminal end of said peptide,
- 7 the method comprising the steps of:
- 8 a) synthesising on a first resin a C-
- 9 terminal portion of said peptide, or its
- 10 derivative, comprising at least three
- 11 successive amino acid residues or their
- 12 derivatives, by successive coupling of
- 13 selected amino acids, small peptides or
- 14 their derivatives, said first resin being
- 15 suitable for the formation of peptides
- 16 having a proline residue or a proline
- 17 derivative positioned at, or at proximity
- 18 of, the C-terminal end of said peptide;
- 19 b) cleaving the C-terminal portion thus
- 20 obtained from said first resin;
- 21 c) reattaching said C-terminal portion to a
- 22 second resin which is generally suitable
- 23 for the synthesis of peptides but is
- 24 unsuitable for the formation of peptides
- 25 having a proline residue or a proline
- 26 derivative positioned at, or at proximity
- 27 of, the C-terminal end of said peptide;
- 28 and
- 29 d) coupling selected amino acids, small
- 30 peptides or derivatives to the C-terminal
- 31 portion to obtain said given peptide.
- 32

- 1 2. The method of Claim 1 wherein said peptide is
2 a long peptide.
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- 4 3. The method of Claim 1 or 2 wherein said given
5 peptide is a chemokine having a proline
6 residue or a proline derivative at the C-
7 terminal or at proximity thereof.
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- 9 4. The method of any one of Claims 1 to 3,
10 wherein said first resin is chosen so that it
11 does not lead to the formation of cyclic
12 dipeptide and in particular diketopiperazine
13 compounds.
14
- 15 5. The method of any one of Claims 1 or 4,
16 wherein said step a) and/or d) is achieved by
17 successive coupling of the predetermined amino
18 acid residues or derivatives.
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- 20 6. The method of any one of Claims 1 to 5,
21 wherein said first resin for the formation of
22 the C-terminal portion is the 2-chlorotrityl
23 chloride resin.
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- 25 7. The method of any one of Claims 1 to 6,
26 wherein said second resin is a resin of the
27 type having benzyl ester linkers.
28
- 29 8. The method of any one of Claims 1 to 7,
30 wherein said second resin is a Wang type
31 resin.
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1 9. The method of any one of Claims 1 to 8,
2 wherein said given peptide as up to 150 amino
3 acid residues.

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5 10. The method of any one of Claims 1 to 9,
6 wherein the cleaving step is achieved using a
7 mild acid treatment, for example 20%
8 trifluoroethanol in dichloromethane.

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10 11. The method of any one of Claims 1 to 10,
11 wherein the C-terminal portion is fully
12 protected so it can be attached directly onto
13 the second resin.

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